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State of New Mexico  
**ENVIRONMENT DEPARTMENT**

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General  
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included  
12/29/04  
com.



RON CURRY  
SECRETARY

DERRITH WATCHMAN-MOORE  
DEPUTY SECRETARY

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

December 27, 2004

David Gregory, Federal Project Manager  
Department of Energy-Los Alamos Site Office  
528 35<sup>th</sup> Street, Mail Stop A316  
Los Alamos, NM 87544

G. Pete Nanos, Director  
Los Alamos National Laboratory  
P.O. Box 1663, Mail Stop A100  
Los Alamos, NM 87545

**RE: REQUEST FOR WELL WATER LEVEL DATA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID: NM0890010515**

Dear Messrs. Gregory and Nanos:

The New Mexico Environment Department (NMED) hereby requests all water level measurements, collected by the United States Department of Energy (DOE) and the Regents of the University of California (collectively, the Permittees), from alluvial, intermediate and regional aquifer wells drilled since 1997. NMED reminds the Permittees that this information is a requirement under the Permittees' permit (*see* Module VIII Section F [Reporting Requirements]). Note also that collection of this information will also be required under Section IX.B.2.h.i of the draft Consent Order. Submission of this information on a consistent basis will be required under Section XI.D of the draft Consent Order.

The Permittees have been conducting ground water investigations under the approved Hydrogeologic Workplan, which requires that all wells are to be fitted with transducers (*see* Section 4.2.2.2). The Permittees' water level data set should include data from more than 24 regional aquifer wells installed since 1997. NMED therefore expects the data set do be quite extensive.

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These data shall be prepared in Excel spreadsheet electronic format and will include separate tables for each set of wells. Two hardcopies of each set of tables shall also be submitted. In the future this suite of information will be a requirement when each well is sampled. NMED has the following formatting requirements for these submittals.

This letter is prompted by concerns regarding a report entitled "Manual and Transducer Groundwater Levels from Test Wells at Los Alamos National Laboratory, 1992-2003" (dated April 2004 and referenced by LA-14132). NMED found the report to be inadequate and potentially misrepresenting the characterization of regional aquifer. The basic underpinning of NMED's conclusion is that the Permittees failed to use the best available data in creating the potentiometric surface map of the regional aquifer water table below the Pajarito Plateau. Rather, only data from test wells constructed during the early years of operation at the facility were utilized in construction of the potentiometric surface maps.

NMED therefore requires the Permittees to provide their rationale for not utilizing more recent water level data. The potentiometric surface maps should be reconstructed to reflect data incorporated from more recently drilled wells (i.e., post-1997). The updated maps should also be submitted with the data requested in this letter. Data utilized in the creation of the revised map must also be identified and discussed.

The data submittal must include accurate summaries of water level monitoring activities completed, and summaries of all data collected. The submittal must include copies of field notes, water level measurement method(s), calculated uncertainties or per cent error for all measurements, and a cross-referenced table of proposed water level monitoring activities outlined in previously submitted work plans or field implementation plans, compared to actual water level data collected (noting any and all variations). Include rationale for any changes made to the scope of work.

NMED requires that the following information be included for each alluvial, intermediate, and regional well.

The first Excel spreadsheet must include the following information for each well:

1. Location of wells shall include the well ID and canyon or general geographic location of the well
2. X,Y coordinates, well head elevation, and method used to gather data such as licensed surveyor, GPS, or other methods
3. Dates the well was drilled and construction completed
4. Depth of each well, screened interval(s) elevation, screen length and filter pack length (e.g., Westbay)
5. Date of measurement(s)
6. Water level measurement(s)
7. Relative quality of the water level data and rationale for the determination

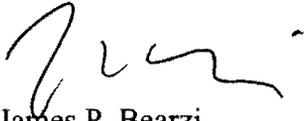
8. Percent error in water level measurements
9. Brief description of how water levels were measured (e.g., state whether tape measurements or transducers were used)
10. Calibration date(s) of transducer(s)
11. Datum used and its consistency between monitoring events

The second Excel spreadsheet must include cross-reference information for each well such as:

1. Period of record
2. Frequency of measurements
3. Station (Well ID, Multi-well Port ID)

Along with the hard copy of the report an electronic copy should be submitted. The Permittees must submit all information requested within thirty days of the date of this letter. Should you have any questions, please feel free to contact John Young of my staff at (505) 428-2538.

Sincerely,



James P. Bearzi

Chief

Hazardous Waste Bureau

cc: J. Young, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
L. King, EPA 6PD-N  
J. Ordaz, DOE LASO, MS A316  
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file: Reading and LANL